

STATE OF MINNESOTA  
Minnesota Department of Commerce



TO: Edward Garvey, Director  
Office Energy Security  
THROUGH: Marya White, Manager *mmw*  
FROM: William Cole Storm, Staff  
DOC OES EFP (Tel: 651-296-9535)  
RE: DOC Staff Recommendation on Content of the Environmental Assessment  
Xcel Energy Monticello Nuclear Generating Plant Uprate Project  
PUC Docket No. E002/GS-07-1567  
PUC Docket No. E002/CN-08-185

Date: June 10, 2008

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**ACTION REQUIRED:** Signature of the Director on the attached Order, "Environmental Assessment Scoping Decision." Once signed, the Department of Commerce (DOC) Office of Energy Security (OES) Energy Facility Permitting (EFP) staff will mail the notice of the order to interested parties.

**BACKGROUND:**

Xcel Energy proposes to uprate the electrical generating capacity of MNGP from 585 megawatts electric to 656 megawatts electric (MWe). The uprate will occur in two phases – the first completed by 2009, the second by 2011.

The MNGP utilizes a boiling water reactor (BWR). In a boiling water reactor, a nuclear reaction in the reactor core generates heat, which boils water to produce steam inside the reactor vessel, which in turn is directed to turbine generators to produce electrical power. The steam is cooled in a condenser and returned to the reactor vessel to be boiled again. The cooling water is force-circulated by electrically powered feedwater pumps. Emergency cooling water is supplied by other pumps, which can be powered by onsite diesel generators.

The 71 MWe uprate will be achieved by increasing the steam output of the nuclear reactor and capturing this additional output with improved electrical generation equipment and systems. Steam output will be increased through an increase in the number of new fuel assemblies replaced in the reactor core at each refueling.

***Need Docket***

This project requires a Certificate of Need (CON) from the Commission pursuant to sections 216C.05 to 216C.30. Xcel Energy filed an application for a CON with the Commission for the project on February 14, 2008, in accordance with Minnesota Rules Chapter 7829 and 7849. On April 10, 2008, the Commission accepted the application as complete (April 18, 2008 order).

The docket number for the certificate of need is E002/CN-08-185.

The Department of Commerce Office of Energy Security (OES) prepares an Environmental Report (ER) on proposed large electric power generating plants that come before the PUC for a determination of need (Minn. Rules 7849.7100). The ER must contain information on the human and environmental impacts of the proposed project associated with the size, type, and timing of the project, system configurations, and voltage. The environmental report must also contain information on alternatives to the proposed project and address mitigating measures for anticipated adverse impacts.

### ***Siting Docket***

The proposed uprate of the electrical generating capacity of the MNGP from 585 MW electric to 656 MW electric falls within the definition of a Large Electric Power Generating Plant in the Power Plant Siting Act (Minnesota Statutes 216E.001 to 216E.18) and, thus, requires a Site Permit from the Commission prior to construction.

The proposed MNGP power uprate qualifies for the alternative environmental review process (Minn. Rule 7849.5500) and Xcel Energy applied for a site permit following the alternative review process on May 2, 2008. On May 8, 2008, the Commission accepted the application as complete (May 12, 2008 order).

Under the Alternative Review Process, an applicant is not required to propose any alternative sites or routes, but must include in the application the same information required under the full process (Minn. Rule 7849.5220). The OES Energy Facility Permitting (EFP) staff holds a public information/scoping meeting, develops a scoping decision recommendation and prepares a document called an Environmental Assessment. The review process begins with the determination by the Commission that the application is complete. The Commission has six months to reach a decision under the Alternative Process from the time the application is accepted. The commission must issue a certificate of need prior to issuing a site permit.

### **ENVIRONMENTAL ASSESSMENT**

Minnesota Rule 7849.7100 provides that in the event an applicant for a certificate of need for a large energy project applies to the Commission for a site permit prior to the time the OES completes the environmental report, OES may elect to prepare a single environmental review document, termed an EA, which incorporates the requirements of both processes.

EFP staff recommends combining the two documents and has reflected that recommendation in the attached Scoping Decision.

**SCHEDULE:** The Environmental Assessment will be completed by July, 31, 2008.

# STATE OF MINNESOTA

## OFFICE OF ENERGY SECURITY

**In the Matter of Xcel Energy's Application  
for a Certificate of Need and Application for a  
LEPGP Site Permit for the proposed Uprate  
project at the Monticello Nuclear Generating  
Plant.**

**ENVIRONMENTAL ASSESSMENT  
SCOPING DECISION  
PUC Docket No. E002/CN-08-185  
PUC Docket No. E002/GS-07-1567**

The above-entitled matter came before the Director of the Office of Energy Security (OES) for a decision on the scope of the Environmental Assessment (EA) to be prepared on the proposed Uprate Project at the Monticello Nuclear Generating Plant.

The OES's Energy Facility Permitting (EFP) staff held a public meeting on May 29, 2008, to discuss the project with the public and to solicit input into the scope of the EA to be prepared. The public was given until June 9, 2009, to submit written comments regarding the scope of the EA.

Having reviewed the comments submitted and consulted with EFP staff, I hereby make the following Scoping Order.

### **MATTERS TO BE ADDRESSED**

The EA on the MNGP Uprate project will address the following matters:

- 1.0 OVERVIEW
- 2.0 INTRODUCTION
  - 2.1 Project Description
    - 2.1.1 Description of Power Generating Equipment and Processes
    - 2.1.2 Air Emission Control Equipment
    - 2.1.3 Water Use
    - 2.1.4 Wastewater
    - 2.1.5 Solid and Hazardous Waste Generation
    - 2.1.6 Fuel Supply
    - 2.1.7 Electrical Interconnection
  - 2.2 Purpose
  - 2.3 Sources of Information
- 3.0 REGULATORY FRAMEWORK
  - 3.1 Certificate of Need
  - 3.2 Site Permit Requirement
    - 3.2.1 Environmental Assessment
    - 3.2.2 Public Hearing
  - 3.3 Other Permits
- 4.0 PROJECT ALTERNATIVES
  - 4.1 No-build Alternative
  - 4.2 Demand Side Management
  - 4.3 Purchase Power

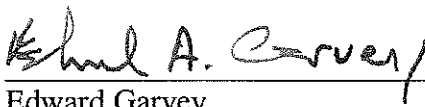
- 4.3.1 Long term Purchase Power
- 4.3.2 Short term Purchase Power
- 4.4 Alternative Fuels
  - 4.4.1 Fossil Fuel Technologies
  - 4.4.2 Renewable Resource Technologies
- 4.5 Up-grading Existing Facilities
- 4.6 New Transmission
- 5.0 ENVIRONMENTAL SETTING
- 6.0 HUMAN AND ENVIRONMENTAL IMPACTS
  - 6.1 Air Quality
  - 6.2 Biological Resources
  - 6.3 Culture, Archeological and Historic Resources
  - 6.4 Geology and Soils
  - 6.5 Health and Safety
  - 6.6 Land Use
  - 6.7 Noise
  - 6.8 Socioeconomics
  - 6.9 Transportation
  - 6.10 Visual Impacts and Aesthetics
  - 6.11 Water Resources
    - \* Surface Water
    - Groundwater
    - Wetlands
  - 6.12 Waste Management and Disposal
    - Wastewater
    - Solid Waste
    - Hazardous Waste
- 7.0 SUMMARY OF MITIGATIVE MEASURES

#### **SCHEDULE**

The EA will be completed by July 31, 2008.

Signed this 10 day of June, 2008

STATE OF MINNESOTA  
OFFICE OF ENERGY SECURITY



Edward Garvey,  
Director